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| APPLICATION NO.                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 09/584,656                      | 05/30/2000  | Ivo Raaijmakers      | ASMEX.137C1         | 2013             |
| 20995                           | 7590        | 12/01/2004           | EXAMINER            |                  |
| KNOBBE MARTENS OLSON & BEAR LLP |             |                      | LEO, LEONARD R      |                  |
| 2040 MAIN STREET                |             |                      | ART UNIT            |                  |
| FOURTEENTH FLOOR                |             |                      | PAPER NUMBER        |                  |
| IRVINE, CA 92614                |             |                      | 3753                |                  |

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/584,656

Applicant(s)

RAAIJMAKERS, IVO

Examiner

Leonard R. Leo

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 53-59, 65, 67-69 and 71-77 is/are pending in the application.
- 4a) Of the above claim(s) 56-58, 67 and 77 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 72-76 is/are allowed.
- 6) ☒ Claim(s) 53-55, 59, 65, 68, 69 and 71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The amendment filed on September 14, 2004 has been entered.

Claims 53-59, 65, 67-69 and 71-77 are pending, and claims 56-58, 67 and 77 remain withdrawn.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 53-55, 59, 65, 68-69 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmine et al in view of Bahng.

Ohmine et al discloses all the claimed limitations except a heat exchange member. As evidenced by Moore et al, a typical RTP apparatus inherently includes a gas inlet and outlet.

Bahng discloses a heat exchanger comprising a processing chamber 14; a substrate support/movable member 74; and a heat exchange member 18 for the purpose of actively cooling the substrate.

Since Ohmine et al and Bahng are both from the same field of endeavor and/or analogous art, the purpose disclosed by Bahng would have been recognized in the pertinent art of Ohmine et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Ohmine et al a heat exchange member for the purpose of actively cooling the substrate as recognized by Bahng.

Art Unit: 3753

Claims 53-55, 59, 65, 68-69 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al in view of Bahng.

Moore et al (Figure 2A) discloses all the claimed limitations except a heat exchange member.

Bahng discloses a heat exchanger comprising a processing chamber 14; a substrate support/movable member 74; and a heat exchange member 18 for the purpose of actively cooling the substrate.

Since Moore et al and Bahng are both from the same field of endeavor and/or analogous art, the purpose disclosed by Bahng would have been recognized in the pertinent art of Moore et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Moore et al a heat exchange member for the purpose of actively cooling the substrate as recognized by Bahng.

***Allowable Subject Matter***

Claims 72-76 allowed.

***Response to Arguments***

The rejection in view of Ratliff et al is withdrawn in view of the declaration filed under 37 CFR 1.131.

No further comments are deemed necessary at this time.

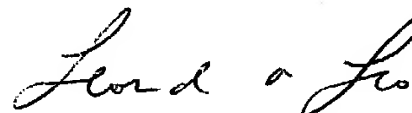
Art Unit: 3753

***Conclusion***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



LEONARD R. LEO  
PRIMARY EXAMINER  
ART UNIT 3753

November 29, 2004